

## CLAIMS

What is claimed is:

1. A dietary supplement for providing nutritional product saccharides which are essential components of glycoproteins in a mammal, said dietary supplement comprising a nutritionally effective amount of at least one saccharide, in monomeric, oligomeric or polymeric and derivatized or underivatized form, selected from the group consisting of:

galactose, glucose, mannose, N-acetylneuraminic acid, fucose, N-acetylgalactosamine, N-acetylglucosamine, xylose, arabinose, glucuronic acid, galacturonic acid, iduronic acid, arabinogalactan and acetylated mannose;

provided that:

- 1) when mannose is present alone, it is present in monomeric form; and
- 2) when acetylated mannose is present alone, it is present in monomeric form.

2. A dietary supplement for providing nutritional product saccharides which are essential components of glycoproteins in a mammal, said dietary supplement comprising a nutritionally effective amount of at least two saccharides, in monomeric, oligomeric or polymeric and derivatized or underivatized form, selected from the group consisting of:

galactose, glucose, mannose, N-acetylneuraminic acid, fucose, N-acetylgalactosamine, N-acetylglucosamine, xylose, arabinose, glucuronic acid, galacturonic acid, iduronic acid, arabinogalactan, and acetylated mannose.

3. A dietary supplement for providing nutritional product saccharides which are essential components of glycoproteins in a mammal, said dietary supplement comprising a nutritionally effective amount of at least three saccharides, in monomeric, oligomeric or polymeric and derivatized or underivatized form, selected from the group consisting of:

galactose, glucose, mannose, N-acetylneuraminic acid, fucose, N-acetylgalactosamine, N-acetylglucosamine, xylose, arabinose, glucuronic acid, galacturonic acid, iduronic acid, arabinogalactan, and acetylated mannose.

4. A dietary supplement for providing nutritional product saccharides which are essential components of glycoproteins in a mammal, said dietary supplement comprising a nutritionally

effective amount of at least four saccharides, in monomeric, oligomeric or polymeric and derivatized or underivatized form, selected from the group consisting of:

galactose, glucose, mannose, N-acetylneuraminic acid, fucose, N-acetylgalactosamine, N-acetylglucosamine, xylose, arabinose, glucuronic acid, galacturonic acid, iduronic acid, arabinogalactan, and acetylated mannose.

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5. A dietary supplement for providing nutritional product saccharides which are essential components of glycoproteins in a mammal, said dietary supplement comprising a nutritionally effective amount of at least five saccharides, in monomeric, oligomeric or polymeric and derivatized or underivatized form, selected from the group consisting of:

10 galactose, glucose, mannose, N-acetylneuraminic acid, fucose, N-acetylgalactosamine, N-acetylglucosamine, xylose, arabinose, glucuronic acid, galacturonic acid, iduronic acid, arabinogalactan, and acetylated mannose.

6. A dietary supplement according to claim 2, 3, 4, or 5 wherein said saccharides are provided in oligomeric or polymeric forms as found in:

15 gum tragacanth, guar gum, grain flour, rice flour, sugar cane, beet sugar, potato, milk, agar, algin, locust bean gum, psyllium, karaya gum, seed gums, Larch tree extract, aloe vera extract, gum ghatti, starch, cellulose, degraded cellulose, fructose, high fructose corn syrup, pectin, chitin, acacia, gum arabic, alginic acid, carrageenan, dextran, xanthan gum, chondroitin sulfate, sucrose, acetylated polymannose, maltose, glucan, lentinan, mannan, levan, hemi-cellulose, inulin, fructan, and lactose.

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7. A dietary supplement according to claim 1, 2, 3, 4, or 5 further comprising a nutritionally effective amount of dioscorea complex.

8. A dietary supplement according to claim 1, 2, 3, 4, or 5 further comprising a nutritionally effective amount of a blend consisting of ripened and freeze-dried and powdered raw fruits and vegetables.

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9. A dietary supplement according to claim 8 further comprising nutritionally effective amounts of xanthines and herbal body-toning agents.

10. A dietary supplement according to claim 8, wherein said blend consisting of ripened and freeze-dried and powdered raw fruits and vegetables comprises:

broccoli, brussel sprouts, cabbage, carrot, cauliflower, garlic, kale, onion, papaya, pineapple, tomato and turnip.

11. A dietary supplement according to claim 7 further comprising a nutritionally effective amount of beta sitosterol.

12. A dietary supplement according to claim 1, 2, 3, 4, or 5 further comprising a nutritionally effective amount of melatonin.

13. A dietary supplement according to claim 1, 2, 3, 4, or 5 further comprising an effective amount of a saccharide bioabsorption aid.

14. A dietary supplement according to claim 13 wherein the bioabsorption aid comprises soy lecithin.

15. A dietary supplement according to claim 1, 2, 3, 4 or 5 further comprising nutritionally effective amounts of a dioscorea complex and a blend consisting of ripened and freeze-dried and powdered raw fruits and vegetables.

16. A dietary supplement according to claim 1, 2, 3, 4 or 5 further comprising nutritionally effective amounts of non-toxic vitamins and minerals.

17. A dietary supplement according to claim 16, wherein:

said vitamins comprise A, B1, B12, B2, B6, beta carotene, bioflavonoids, biotin, C, choline, D, E, folic acid, inositol, K, niacinamide, para-aminobenzoic acid, and panthothenic acid; and

said minerals comprise boron, calcium, copper, GTF chromium, iodine, iron, magnesium, manganese, molybdenum, potassium, selenium, silicon, vanadium, zinc.